

**Report Date:** 01 Feb 2013

**Summary Report for Individual Task  
031-COM-1037  
Detect Chemical Agents Using M8 or M9 Detector Paper  
Status: Approved**

---

DISTRIBUTION RESTRICTION: Distribution authorized to U.S. Government agencies and their contractors only based on Technical Manual. This determination was made on 31 Augsut 1998. Insert

AMSTA-AC-NML, AMSTA-AC-NML, Rock Island, IL 61299-7630.Rock Island, IL 61299-7630.

DESTRUCTION NOTICE: Destroy by any method that will prevent disclosure of contents or reconstruction of the document

**Condition:** You are in mission-oriented protective posture (MOPP) 2 in a tactical environment or an area where there is a chemical threat. You are given a protective mask, a booklet of M8 detector paper, a dispenser of M9 detector paper, M256A1 or M256A2 chemical-agent detector kit, assigned M291 skin decontaminating kit or reactive skin decontamination lotion (RSDL), M295 individual equipment decontamination kit, DA Form 1594 Daily Staff Journal or Duty Officer's Log, FM 3-11.4, FM 3-11.3, TM 3-6665-307-10, TM 3-6665-311-10, and a complete set of MOPP gear or a chemical-protective ensemble.

**Standard:** Detect chemical agents using M8 and M9 detector paper, ensuring that the M9 detector paper is attached to places likely to come into contact with liquid chemical agents. Detect and identify all liquid chemical agents in the area that are within the capabilities of the M8 or M9 detector paper without becoming a casualty.

**Special Condition:** 1) Do not wear contact lenses when performing this task, 2) do not use masks with damaged filters because certain models contain hazardous materials, and 3) do not change the filter element in a contaminated environment.

**Special Standards:** None

**Special Equipment:**

**Safety Level:** Low

**MOPP:**

Task Statements
-----------------

**Cue:** None

<div><b>DANGER</b></div>
--------------------------

None

<div><b>WARNING</b></div>
---------------------------

Always wear protective gloves when touching M9 detector paper. Do not get M9 detector paper in or near your mouth or on your skin. The M9 detector paper dye may cause cancer, but the risk is small because very little dye is used.

<div><b>CAUTION</b></div>
---------------------------

None

**Remarks:** None

**Notes:** None

### Performance Steps

1. Detect chemical agents using M9 detector paper.

Note: M8 and M9 detector paper will not detect chemical-agent vapors.

a. Attach the M9 detector paper to your MOPP gear and equipment while wearing chemical-protective gloves.

(1) Place the M9 detector paper on the MOPP gear on opposite sides of your body.

(a) If you are right-handed, place a strip of M9 detector paper around your right upper arm, left wrist, and right ankle.

Note: These are the places where a moving Soldier will most likely brush against a surface (such as undergrowth) that is contaminated with a liquid chemical agent.

(b) If you are left-handed, place a strip of M9 detector paper around your left upper arm, right wrist, and left ankle.

Note: Do not attach M9 detector paper to hot, dirty, oily, or greasy surfaces because it may give a false positive reading.

(2) Place M9 detector paper on equipment where it will come in contact with contaminated objects and is visible to the operator.

## CAUTION

Firing weapons lubricated with lubricating oil, semi-fluid; lubricant, small arms; or lubricant, semifluid, automatic weapons (LSA) may cause false positive responses on the olive drab (OD) detector paper.

b. Monitor the M9 detector paper constantly for any color change. If you observe a color change, immediately do the following:

(1) Mask.

(2) Give the alarm.

(3) Decontaminate as necessary.

(4) Assume MOPP 4.

2. Detect chemical agents using M8 detector paper if you see a liquid that might be a chemical agent or if you observe a color change on the M9 detector paper.

a. Assume MOPP 4 immediately.

b. Prepare the M8 detector paper. Tear out a sheet from the book (use one-half sheet if it is perforated).

Note: You may want to put the paper on the end of a stick or another object and then blot the paper on the suspected liquid agent.

c. Blot (do not rub) the M8 detector paper on the suspected liquid agent. Do not touch the liquid with your protective glove.

## WARNING

Some decontaminants will give false positive results on the M8 detector paper. The M8 detector paper may indicate positive results if used in an area where decontaminants have been used.

d. Observe the M8 detector paper for a color change. Identify the contamination by comparing any color change on the M8 detector paper to the color chart on the inside front cover of the booklet.

(1) A yellow-gold color indicates the presence of a nerve (G) agent.

(2) A red-pink color indicates the presence of a blister (H) agent.

(3) A dark green color indicates the presence of a nerve (V) agent.

(4) Any other color or no color change indicates that the liquid cannot be identified using M8 detector paper.

e. Store the booklet of M8 detector paper.

f. Remain in MOPP4 even if the liquid cannot be identified. Use other types of chemical-agent detector kits to verify the test results.

g. Notify your supervisor of the test results.

Note: M8 detector paper reacts positively to petroleum products, ammonia, and decontaminating solution number 2 (DS2). M9 detector paper reacts positively to petroleum products, insecticides, and antifreeze. Because M9 detector paper only detects (but does not identify) chemical agents, verify all readings with M8 detector paper. If you observe a color change on M8 or M9 detector paper, assume it is a liquid chemical agent. When conducting agent tests at night, remove any colored lens because it may provide a false negative response. Confirm the presence of contamination by using all means of chemical-agent detection available in your area of operation, including a visual check of your surroundings. If you determine that your reading is a false positive, perform the following actions before giving the all clear signal:

1. Ensure that every attempt has been made to recheck the area.
2. Contact your higher headquarters (HQ) or the person in charge, and report the negative results.
3. Await further guidance. The higher HQ contacts all adjacent/attached units to check the status of contamination in their areas. If all units report the absence of contamination, the information is reported up the chain of command.
4. Annotate the above actions on DA Form 1594.

(Asterisks indicates a leader performance step.)

### Evaluation Preparation: CAUTION

Ensure that stimulants are placed on detector paper only and never on the protective clothing.

Setup: Provide the items listed in the task condition statement. Simulate an unknown liquid chemical agent by using expedient training aids (such as brake fluid, cleaning compound, gasoline, insect repellent, or antifreeze). Place drops of the simulated agent on M9 detector paper to obtain a reading. For M8 detector paper, place the simulated agent on nonporous material (such as an entrenching tool).

Brief Soldier: Tell the Soldier that he/she will be entering an area where chemical agents have been used. Tell him/her to attach M9 detector paper to his/her MOPP gear and equipment. Tell him/her that if you observe any acts that are unsafe or that could produce a false reading you will stop the test and he/she will be scored a NO GO.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Detected chemical agents using M9 detector paper.			
a. Attached the M9 detector paper to MOPP gear and equipment while wearing chemical-protective gloves.			
(1) Placed the M9 detector paper on the MOPP gear on opposite sides of body.			
(a) If right-handed, placed a strip of M9 detector paper around right upper arm, left wrist, and right ankle			
(b) If left-handed, placed a strip of M9 detector paper around left upper arm, right wrist, and left ankle.			
(2) Placed M9 detector paper on equipment where it came in contact with contaminated objects and visible to the operator.			
b. Monitored M9 detector paper constantly for any color change. If color change was observed, immediately did the following:			
(1) Masked.			
(2) Gave the alarm.			
(3) Decontaminated as necessary.			
(4) Assumed MOPP 4.			
2. Detected chemical agents using M8 detector paper.			
a. Assumed MOPP 4 immediately.			
b. Prepared the M8 detector paper. Tore out a sheet from the book (use one-half sheet if perforated).			
c. Blotted (did not rub) the M8 detector paper on the suspected liquid agent. Did not touch the liquid with protective glove.			
d. Observed the M8 detector paper for a color change. Identified the contamination by comparing any color change on the M8 detector paper to the color chart on the inside front cover of the booklet.			
(1) A yellow-gold color indicated the presence of a nerve (G) agent.			
(2) A red-pink color indicated the presence of a blister (H) agent.			
(3) A dark green color indicated the presence of a nerve (V) agent.			
(4) Any color or no color change indicated that the liquid could not be identified using M8 detector paper.			
e. Stored the booklet of M8 detector paper.			
f. Remained in MOPP 4 if the liquid could not be identified. Used other types of chemical-agent detector kits to verify the test results.			
g. Notified supervisor of the test results.			

**Supporting Reference(s):**

Step Number	Reference ID	Reference Name	Required	Primary
	DA FORM 1594	Daily Staff Journal or Duty Officer'S Log.	Yes	No
	FM 3-11.3	Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Contamination Avoidance	Yes	No
	FM 3-11.4	Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection	Yes	No
	TM 3-6665-311-10	OPERATORS MANUAL FOR PAPER, CHEMICAL AGENT DETECTOR: M9 (NSN 6665-01-226-5589) {TO 11H2-2-21}	Yes	No
	TM 3-6665-426-10	Operator's Manual for Detector Kit, Chemical Agent: M256A2 (NSN: 6665-01-563-7473)	Yes	No

**Environment:** Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects.

M9 detector paper is not a hazardous waste and does not need material safety data sheets (MSDS).

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, NBC Protection, FM 3-11.5, CBRN Decontamination. Everyone is responsible for safety. A thorough risk assessment must be completed prior to every mission or operation.

**Prerequisite Individual Tasks :** None

**Supporting Individual Tasks :**

Task Number	Title	Proponent	Status
130-LDAC-4428	CBRN Protective Mask Confidence Exercise	130 - Cadet Command	Analysis
031-COM-1019	React to Chemical or Biological (CB) Hazard/Attack	031 - CBRN (Individual)	Approved
130-LDAC-1035	Protect Yourself from Biological and Chemical Contamination Using your Assigned protective mask	130 - Cadet Command	Analysis
031-627-1050	Control Contaminated Waste at a Domestic CBRNE Incident	031 - CBRN (Individual)	Approved
031-506-4010	Write the CBRN Portion to Brigade's Tactical Standard Operating Procedures (TACSOP)	031 - CBRN (Individual)	Approved
031-COM-1042	Protect Yourself from CBRN Injury/Contamination when Changing MOPP using the JSLIST Chemical-Protective Ensemble.	031 - CBRN (Individual)	Approved
031-627-3039	Identify Components of Chemical or Biological (CB) Dissemination Devices	031 - CBRN (Individual)	Approved

**Supported Individual Tasks :**

Task Number	Title	Proponent	Status
031-506-4010	Write the CBRN Portion to Brigade's Tactical Standard Operating Procedures (TACSOP)	031 - CBRN (Individual)	Approved

031-COM-1019	React to Chemical or Biological (CB) Hazard/Attack	031 - CBRN (Individual)	Approved
031-COM-1021	Mark CBRN-Contaminated Areas	031 - CBRN (Individual)	Approved
031-503-1042	Protect Yourself from CBRN Injury/Contamination when Changing MOPP Using the JSLIST	031 - CBRN (Individual)	Approved
031-627-3030	Perform Sample Analysis using the Fourier Transform Infrared Spectrometer	031 - CBRN (Individual)	Approved
130-LDAC-4428	CBRN Protective Mask Confidence Exercise	130 - Cadet Command	Analysis
031-627-1008	Process Through a Technical Decontamination Corridor	031 - CBRN (Individual)	Approved
031-506-4013	Plan Operations for a CBRN Environment	031 - CBRN (Individual)	Approved
031-504-1004	Operate the Improved Chemical-Agent Monitor (ICAM)	031 - CBRN (Individual)	Approved

**Supported Collective Tasks :**

<b>Task Number</b>	<b>Title</b>	<b>Proponent</b>	<b>Status</b>
03-3-0045	Conduct CBRN Dismounted Reconnaissance - Survey or Marking	03 - CBRN (Collective)	Approved
03-5-1021	Maintain an Operations Center	03 - CBRN (Collective)	Approved
03-3-0015	Perform a CBRN Survey	03 - CBRN (Collective)	Approved
03-3-1012	Conduct Thorough Aircraft Decontamination	03 - CBRN (Collective)	Approved
03-3-0044	Conduct CBRN Dismounted Reconnaissance - Locate	03 - CBRN (Collective)	Approved
03-5-1020	Establish a Base of Operations	03 - CBRN (Collective)	Approved
03-3-0047	Conduct CBRN Dismounted Reconnaissance - Sampling	03 - CBRN (Collective)	Approved
03-2-9226	Cross a Chemically Contaminated Area	03 - CBRN (Collective)	Approved
03-3-0012	Conduct CBRN Dismounted Reconnaissance in a Urban Environment	03 - CBRN (Collective)	Approved
03-3-0006	Conduct Initial Site Assessment	03 - CBRN (Collective)	Approved
03-6-0070	Prepare for a Chemical Attack	03 - CBRN (Collective)	Approved
03-5-6596	Conduct CBRN Analytical Mission	03 - CBRN (Collective)	Approved
03-2-9225	Conduct a Chemical Reconnaissance	03 - CBRN (Collective)	Approved
03-2-9203	React to a Chemical or Biological (CB) Attack	03 - CBRN (Collective)	Approved
03-6-0300	Employ CBRNE Analytical Remediation Activity (CARA)	03 - CBRN (Collective)	Approved
03-3-0001	Conduct CBRN Mounted Reconnaissance - Locate	03 - CBRN (Collective)	Approved
17-5-5265	Created from Template: Prepare a Vehicle for a Chemical Attack	17 - Armor (Collective)	Analysis
03-5-1019	Conduct a Civil Support Team (CST) CBRNE Survey	03 - CBRN (Collective)	Approved
03-2-9310	Conduct a Chemical Survey	03 - CBRN (Collective)	Approved
03-3-0046	Conduct CBRN Dismounted Surveillance	03 - CBRN (Collective)	Approved
03-2-5127	Strike Mass Casualty Decontamination Site	03 - CBRN (Collective)	Approved
03-3-5123	Perform Thorough Decontamination	03 - CBRN (Collective)	Approved
03-3-5001	Conduct Fixed-Site Decontamination	03 - CBRN (Collective)	Approved
03-6-0071	Respond to a Chemical Agent Attack	03 - CBRN (Collective)	Approved
03-3-5100	Perform Chemical Unit-Supported Operational Decontamination	03 - CBRN (Collective)	Approved
03-2-9224	Conduct Operational Decontamination	03 - CBRN (Collective)	Approved
03-3-5002	Conduct Terrain Decontamination	03 - CBRN (Collective)	Approved

**ICTL Data :**

<b>ICTL Title</b>	<b>Personnel Type</b>	<b>MOS Data</b>
Warrior Tasks and Battle Drills	Enlisted	MOS: 000, Skill Level: SL1